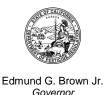


Department of Pesticide Regulation



Brian R. Leahy Director MEMORANDUM

TO: Dr. Marylou Verder-Carlos

HSM-16015

Assistant Director

(No. assigned after issuance of memo)

Pesticide Programs Division

FROM: Lisa Ross, Ph.D.

[Original signed by L. Ross]

Environmental Program Manager II Chief, Worker Health and Safety Branch

(916) 324-4116

DATE: June 30, 2016

SUBJECT: COMPLETION OF EPTC MITIGATION

This memorandum describes the findings of the Worker Health and Safety Branch (WHS) in regards to the need for mitigation of exposures to S-Ethyl-dipropylthiocarbamate (EPTC), a thiocarbamate herbicide.

In 1995, DPR's Risk Characterization Document (RCD) for EPTC (Meierhenry 1995) identified multiple exposure scenarios for EPTC handlers for which Margins of Safety (now called Margins of Exposure) were less than 100. In 1998, DPR scientists determined that a combination of additional personal protective equipment (PPE) and work restrictions could adequately mitigate EPTC exposure for the scenarios of concern (Thongsinthusak 1998). At that time, however, those mitigation measures were not included on EPTC product labels.

As of June 2016, there are two EPTC products with active California registrations (DPR 2016a):

- Eptam 20-G Granules (EPA Reg. No. 10163-281); and
- Eptam 7E Selective Herbicide (EPA Reg. No. 10163-283).

WHS has reviewed the most recent DPR-approved product labels for these two products and determined that both of these products have California-only supplemental labels that adequately mitigate the exposure scenarios of concern, as summarized in Table 1 below. Registration Branch staff determined that DPR first approved those supplemental labels in the early 2000's.

Although EPTC use in California has declined, EPTC continues to be used in production of alfalfa, potatoes, and certain other commodities (DPR 2016b). In 1995, the year of the RCD, reported use of EPTC was 663,701 pounds of active ingredient statewide. Ten years later, in 2005, reported use had dropped to 181,790 pounds. In 2014, the most recent year for which use statistics are available, EPTC use was 235,270 pounds, primarily on alfalfa and potatoes (DPR 2016b).

Dr. Marylou Verder-Carlos June 30, 2016 Page 2

Despite ongoing EPTC use, during the most recent 10 years for which illness statistics are available, 2004 through 2013, only two cases of handler illness or injury associated with EPTC were reported to DPR's Pesticide Illness Surveillance Program (DPR 2016c).

Table 1. Summary of mitigation measures on California-only supplemental labels for EPTC products with active California registrations as of June 2016

Mitigation	on Requirement on the California-only supplemental label of:	
measure	Eptam 20-G	Eptam 7E
	(EPA Reg. No. 10163-281)	(EPA Reg. No. 10163-283)
Additional PPE	Handlers (except pilots)	Handlers (except applicators for water-run
	must wear coveralls and	chemigation) must wear coveralls and half-face
	half-face respirators in	respirators in addition to PPE on the product
	addition to PPE on the	label
	product label	
PPE for	n/a	For center-pivot irrigation systems,
chemigation		mixer/loader/applicators must wear full-body
	(labels do not allow	chemical resistant clothing and half-face
	chemigation)	respirators in addition to the PPE on the
		product label. A closed mixing/loading system,
		an enclosed cab, or other engineering controls
		may replace the PPE clothing according to the
		criteria in the current federal Worker Protection
		Standard.
Work	Limit mixing / loading to	Limit mixing/loading to 500 gallons per
restrictions	a maximum of 1,000	mixer/loader per 21-day period, not to exceed
	pounds per handler per	75 gallons per mixer/loader per day
	21-day period, not to	
	exceed 100 pounds per	Limit application through center pivot irrigation
	handler per day	to 40 gallons per applicator per 21-day period,
		not to exceed 20 gallons per applicator per day
		Limit other ground applications to 210 gallons
		per applicator per 21-day period, not to exceed
		30 gallons per applicator per day. If ground
		applicators use enclosed cabs, limit application
		to 280 gallons per applicator per 21-day period,
		not to exceed 30 gallons per applicator per day.
Record-keeping	The operator of the property shall include in their Pesticide Use Records the	
to support work	name of the person(s) that handled the product for each application	
restrictions		-

Dr. Marylou Verder-Carlos June 30, 2016 Page 3

Given that all currently-registered EPTC products have California-only supplemental labels containing mitigation measures that adequately address the exposure scenarios of concern (Thongsinthusak 1998), and given the low number of reports of EPTC-related illness during the past 10 years, WHS finds that there is no need for further mitigation action for EPTC. Your approval of this conclusion is requested.

cc: Kevin Solari, Environmental Program Manager I, Worker Health & Safety Branch Ann Hanger, Senior Environmental Scientist (Specialist), Registration Branch

APPROVAL

[Original signed by M. Verder-Carlos]
Marylou Verder-Carlos, Assistant Director

7/5/2016

Date

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